DOCUMENT RESUME

ED 221 897 CS 503 973

AUTHOR Romero, Gloria
TITLE An Experimental Study of the Effects of Counterattitudinal Messages on Decreasing Communication Apprehension.
PUB DATE Nov 82
NOTE 13p.; Paper presented at the Annual Meeting of the Speech Communication Association (68th, Louisville, KY, November 4-7, 1982).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attitude Change; *Communication Apprehension; *Communication Research; Higher Education; Public Speaking; *Speech Communication; *Student Attitudes

ABSTRACT

A study was conducted to investigate the effects of audiotaped counterattitudinal messages (messages counter to a person's irrational beliefs that are designed to help change negative attitudes) on communication apprehension. One hundred and fifty undergraduate speech communication students divided into control and experimental groups listened to a tape of music and a suggestion for relaxation, with a counterattitudinal message added to the experimental group tape. The Personal Report of Public Speaking Apprehension (PRPSA) was employed as a pretest and double posttest (immediately following the treatment and again just prior to the student's first speech) to assess the degree of communication apprehension. The Behavioral Assessment of Speech Anxiety (BASA) was used as a posttest to assess the behavioral manifestations of speech anxiety. The results from the PRPSA revealed significant differences between the experimental and control groups for treatment effect. The second posttest results indicated that the positive impact of the treatment not only continued but increased. The results from the observer-rated anxiety scores of the BASA revealed no significant differences between the experimental and control groups in any of the four factors for the overall estimate of anxiety. (HTH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED221897

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

AN EXPERIMENTAL STUDY OF THE EFFECTS OF COUNTERATTITUDINAL MESSAGES ON DECREASING COMMUNICATION APPREHENSION

Gloria Romero

University of Nevada

Reno, Nevada

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Gloria Romero

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Presented to:

Conference on Communication Apprehension

The Speech Communication Association
Annual Convention

Louisville, Kentucky

November 4-7, 1982

CS503973

AN EXPERIMENTAL STUDY OF THE EFFECTS OF COUNTERATTITUDINAL MESSAGES ON DECREASING COMMUNICATION APPREHENSION

One of the objectives of a teacher in the basic college speech course is to improve students' concepts of themselves as speakers by developing their communication skills. In the performance of this duty, the teacher is faced with the problem of assisting the highly anxious students overcome negative attitudes about their abilities to speak in front of others. These are the students suffering from the handicap of communication apprehension, and for whom normal classroom instruction is not sufficient.

McCroskey, Daly, Richmond, and Cox (1975) define communication apprehension as a "broad-based, personality-type characteristic that is characterized by withdrawal from and avoidance of communicating as well as feels of discomfort and tension while communicating" (p. 51). Communication apprehension is not to be confused with a general anxiousness or with feelings of apprehension; but rather, it is the excessive fear or anxiety a person experiences while communicating, especially in a public speaking setting (McCroskey, 1980; emphasis added).

The most obvious effects of oral communication apprehension on student achievement involve instructional method courses which require students to participate orally, as in a basic speech course. Data collected from students over the last eight years suggest that 10-20% of American college students enrolled in these courses are communication apprehensive, prefer lecture classes to performance courses, are in class because the course is required, and regard the academic requirement of extensive participation and speech presentation as threatening. Thus, the fear of public speaking is one of the most intense fears reported (Kougl, 1980; Scott and Wheeless, 1977).

Communication apprehension is described as a variable that is associated with the individual's total personality. The description of the characteristics of highly communication apprehensive students is a negative one. Among the most serious traits the students suffer are insecurity, withdrawal, indecisiveness, and dissatisfaction. These students are easily embarrassed, lack self-control, are unable to express thoughts, have a low need to achieve, and interpret questions as personal criticism. They might well be described, therefore, as being typically introverted and lacking both self-esteem and confidence in their ability to communicate with others. (McCroskey, Sorenson, and Daly, 1976; Burgoon, 1976; and Phillips, 1968).

Communication apprehension can become a handicap when the excessive fear or anxiety that students experience in the presentation of a speech causes them to suffer sufficiently traumatic disturbances such as nausea, headaches, low or rapid heartbeat, excessive perspiration, confusion, and forgetfulness. The visible behaviors of this excessive fear are heavy breathing, swaying, pacing back and forth, trembling hands, fidgeting, shuffling of feet, blushing, stiff arms, tense facial muscles, lack of eye contact, deadpan expressions, hands in pockets, swinging of arms, and the like. Because of this "unsociable behavior" (Hyde, 1980, p. 140) that effects oral performance, students may have negative classroom experiences which often include poor attendance, withdrawal from interaction with others, lowered performance, and a poor attitude toward school in general (Ickes, 1971; Clevenger and King, 1961).

Speech communication teachers who have repeatedly observed the terrified efforts of the communication apprehensive students trying to address the class, who have heard repeated excuses from the students for not being prepared, who have witnessed the students disappear when the first speech was due, recognize that the fundamental speech course becomes a very unpleasant, anxiety-provoking experience, and that the negative reactions surpass the benefits that are obtained in class. Students confronted by very serious communication apprehension tend to drop out of the course, thus denying themselves the only systematic instruction they may receive (McCroskey, 1977; Ickes, 1971).

The most common applications for reducing communication apprehension in the basic public speaking course have been (1) requiring the preparation and presentation of various speeches throughout the semester, (2) using videotape recordings of speeches for performance feedback, (3) adapting options for assignments other than speech presentations, (4) eliminating grading on the presentations, or (5) avoiding forced involuntary participation. There is little evidence that these approaches for helping students gain confidence are effective in improving the students' self-concepts as speakers or reducing their anxiety. Rather, treatment of the apprehension appears to be the most direct and effective plan open to speech communication educators (McCroskey, 1977; Mulac, 1974, Judd, 1973).

In an effort to develop appropriate treatment techniques for the reduction of communication apprehension, various colleges and universities have initiated experimental treatment programs. These treatment techniques do not substitute for speech instructions, but attempt to augment the teacher's assignment of providing the most effective training for the greatest number of students in the limited time available. Since communication apprehension is viewed as a cognitive experience, such treatments for this anxiety as group counseling (Giffin and Bradley, 1969), systematic desensitization (McCroskey, Ralph, and Barrick, 1970), Goss, Olds, and Thompson, 1978), hypnosis (Barker, Cegala, Kibler, and Wahler, 1972), rational-emotive therapy (Trexler and Karst, 1972), relaxation training (Goldfried and Trier, 1974), self-relaxation and rehearsal feedback (Sherman, Mulac, and McCann,

1974), audiotaped messages (Lohr and McManus, 1975), anxiety-inhibiting statements and relaxation (Weissberg, 1975), skills training and self-administered desensitization (Marshall, Stoian, and Andrews, 1977), skills training, cognitive restructuring, and relaxation (Fremouw and Zitter, 1978), cognitive restructuring (Fremouw and Scott, 1979), and the like have been designed to alter the negative behaviors of highly anxious students with the hope that permanent changes would occur. The relative effectiveness of the aforementioned treatment techniques have been measured by reliable and valid self-report measures and/or observer-rater measures of actual behavior. Although determined as successful, most treatment programs involve complex procedures requiring staff therapists, specially designed courses, trained graduate helpers, and long sessions with students requiring substantial out-of-class time for educators.

Purpose

The attitude change technique of counterattitudinal messages (also known as affirmations) is a persuasive strategy derived from social psychology to alter the maladaptive attitudes that maintain psychological stress. As a direct approach to attitude change, clients are exposed to messages that are counter to their irrational beliefs with the intent that a change in attitude will occur. They are recognized as an efficient process for eradicating speicifc negative habit patterns such as the fear of flying, smoking, test and math anxiety, and the like. Affirmations are intended also to enhance the process of personal growth by heightening one's self concept consequently "fulfilling the potentialities of self" (Wells and Marwell, 1976, p. 19).

The present study was an attempt to assess the relationship between self-reported and manifested communication apprehension and the use of audiotaped counterattitudinal messages. The purpose of the study was to investigate the effects of audiotaped counterattitudinal messages on communication apprehension and to test the assumption that the use of these messages would reduce the anxiety of those subjects exposed to them. It was supposed that there would be a greater decrease of communication apprehension for high than for low anxious students, and that an interaction would be present such that the difference between high and low anxious subjects would be greater in experimental than in control conditions.

Method

Subjects

The subjects of this study consisted of 150 undergraduate students in six sections of introductory speech communication courses. Since the sample was obtained by using students from intact classes, it does not reflect a random selection of subjects from the students enrolled in all the introductory level undergraduate speech communication

courses. However, random procedures were used in the assignment of subjects to either the control or the experimental group in the experimental design.

Audiotaped Counterattitudinal Message Technique

Both the control group and the experimental group listened to a professionally recorded cassette tape. The recorded tapes for both groups included music and a brief suggestion for relaxation. Both were comparable with the exception that the counterattitudinal messages were added to the experimental tape as the independent variable. These messages were carefully composed affirmations designed to expose the subjects to messages communicating the attitudes of being an excellent speaker, of being well prepared and completely at ease before any group, and of being successfuly at presenting ideas before an audience (Boyle, 1975; Shealy, 1977). Several affirmations fostering the attitude of liking and accepting oneself were also included. Subjects from both groups were asked to listen to their tapes for a period of twenty-one consecutive days.

Dependent Measures

The Personal Report of Public Speaking Apprehension (PRPSA) instrument was employed to assess the degree of communication apprehension that an individual reports in a public speaking setting. This self-report instrument is a Likert-type scale comprised of thirty-four statements which cover a variety of anxiety stimuli related to public speaking. The estimated internal reliability has consistently been reported to exceed .90 and the test-retest reliability is about .80 (McCroskey and Richmond, 1975). The PRPSA has reasonably high content validity (Larson, Backlund, Redmond, and Barbour, 1978).

The instrument was adapted for this study to include five additional statements regarding self-help ("I like to participate in self improvement programs"), religiosity ("I pray privately twice a week"), past history ("I have a great deal of experience in public speaking"), and following instructions ("The questions I miss on tests are usually due to my not following instructions"). Also, the scoring on the instrument was reversed to indicate (1) least apprehensive to (5) most apprehensive than (1) most apprehensive to (5) least apprehensive. To account for the fact that some statements were written in the positive ("While giving a speech I know I can control my feelings of tension and stress") and others written in the negative ("While giving a speech I get so nervous I forget facts I really Know"), it was necessary to adjust the scores of the positive statements by reversing them before totaling the scores. That is, if a positive statement received a 5 it was reversed to a 1; if the score was a 1, it was reversed to a 5. The scores of 4 and 2 were also reversed; the score of 3 remained the same. Thus the scores were adjusted upward. This was done to facilitate the understanding of what the scores represented; a high score was indicative of high apprehension and a low score indicative

of low apprehension. Maximum possible high score was 180.

The Behavioral Assessment of Speech Anxiety (BASA) measure developed by Mulac and Sherman (1974) to assess the behavioral manifestations of speech anxiety was also employed. The BASA scale is an attempt to categorize and measure physical signs of speech anxiety. It is used to observe such behaviors as vocal qualities, facial expressions, and bodily movements which are included under the four factors of rigidity, inhibition, disfluency, and agitation, and provides for an overall estimate of anxiety. Prior factor analysis of this instrument allows the observer to focus on specific manifestations of speech anxiety. This instrument involves an 0-9 scale to evaluate each variable separately as an index of speech anxiety. The BASA instrument's inter-reliability has been .98. The internal-reliability of weighted total scores is reported at .95 (Mulac and Sherman, 1974). Instead of scoring the fifteen variables separately, a modified scoring sheet was developed which describes the behaviors represented by each factor. The ratings were obtained by scoring the four factors and overall estimate of speech anxiety, which gave a total of five scores for each subject.

Procedure

The design for the PRPSA instrument was a non-random selection of intact classes with a randomized pretest-posttest/control group design. In the first week of class, subjects in each class were administered the PRPSA to obtain pretest scores of self-reported communication apprehension. The PRPSA pretest scores were rank-ordered continously for each intact class with scores of 120 and above indicative of high apprehension and scores of 119 and below indicative of low apprehension. These scores were blocked on initial apprehension in sets of two (one high apprehension and one low apprehension). For each set of scores, subjects were randomly assigned to one of the two groups. Subjects from both the control group and the experimental group listened to their respective audiotapes daily for a period of twenty-one consecutive days (including Saturday and Sunday). To obtain the posttest scores, the PRPSA was readministered immediately following the twenty-one day treatment and immediately prior to each subject's first speech.

The design for the BASA instrument was a posttest only design. The assumption underlying this decision was that if the subjects are randomly assigned to conditions and the sample is large enough, one can assume equivalence of the groups before treatment. Thus, the first speech of each subject was videotaped for the use of the BASA instrument by trained observer-raters.

Results

As this was a formulative study which explored a potentially new way of helping students overcome communication apprehension in the public speaking setting, the significance level of $p = .10$ was used to reject the null hypothesis in each of these tests.

A two-way analysis of variance was used for both the PRPSA and BASA measures. The first analysis compared the effects of the counter-attitudinal messages on the self-report of communication apprehension. Change scores of the PRPSA between pretest and first posttest, and between pretest and second posttest scores compared the differences among classes, between experimental and control group, between high and low apprehension, and between females and males. The second analysis compared the effects of counterattitudinal messages on the manifested behavior of communication apprehension. The four factor scores and the overall estimate of speech anxiety scores from BASA were compared for differences among classes, between experimental and control, and between high and low apprehension.

The results from the self-reported anxiety scores of the PRPSA for the comparison between the pretest and first posttest, which was administered immediately after the treatment, reveal significant differences between the experimental and control group for treatment effect ($F = 5.975$, $p = .016$). Data for the comparison between the pretest and second posttest, which was administered immediately after the first speech, reveal significant difference in the treatment effect between the experimental and control groups ($F = 11.771$, $p = .001$) giving an indication that the impact of the counterattitudinal messages not only continued but increased. The difference among classes was not significant. The treatment had the effect of decreasing the self-reported anxiety consistently across the six classes. Highly apprehensive students did not show a decrease of anxiety greater than the low apprehensives. The effect for the variable "sex" under Main Effects is shown as $F = 3.281$, $p = .073$.

The results from the observer-rated anxiety scores of BASA reveal no significant differences between the experimental and control groups in any of the four factors or the over-all estimate of anxiety. Data reveal a difference between classes on Factor 1 - rigidity and on Factor 2 - inhibition. For Factor 3 - disfluency and Factor 4 - agitation, and the overall estimate of anxiety scores there is no difference between classes and no difference in treatment effect.

Discussion

The present study was an attempt to assess the relationship between self-reported and manifested communication apprehension and the use of counterattitudinal messages. The purpose of the study was to investigate the effects of audiotaped counterattitudinal messages on communication apprehension and to test the assumption that the use of these messages would decrease the anxiety.

The results indicate that as far as the self-report measure of communication apprehension (PRPSA) is concerned, subjects exposed to the audiotaped counterattitudinal messages exhibited a greater decrease in self-reported anxiety than those not exposed, and that the impact

of the treatment not only continued but increased. The treatment had the effect of decreasing the self-reported anxiety consistently across six classes. The results from the behavioral measure (BASA) revealed no difference between those subjects exposed to the counterattitudinal messages and those who were not.

Although there was no behavioral support for the counterattitudinal message technique, there is sufficient reason to believe this is achievable. It would appear that a reported reduction in communication apprehension would lead to a favorable improvement on the speakers' observable performance. That is, those subjects who reported a low score of apprehension on the second posttest of the PRPSA would manifest less anxiety and receive lower ratings, and those who reported a high score of apprehension on the second posttest of the PRPSA would manifest some visible and audible signs of tension as controlling one's behavior is a difficult task (Goss, Olds, and Thompson, 1978). In this study, however, all subjects received from low to moderate observer-ratings consistently across all four factors and the overall estimate of anxiety. The score of 6 (moderate) was the highest rating given on a scale of 0 (not at all) to 9 (strong).

Part of the failure in the restricted use of the BASA scale may be attributed to the fact that the raters experienced a "skills decay" from the time of the four-hour training to the actual rating of the videotapes. The clustering of scores toward the lower end of the scale (Mean score on the overall estimate of anxiety on BASA was 3.085) might be an indication that the raters did not fully understand nor recognize the behaviors under each factor when a subject did indeed manifest signs of communication apprehension.

In an attempt to explore the discrepancy between the results of the study for self-reported and behavioral manifestations of anxiety, two measures of anxiety were correlated. The second posttest change scores from the PRPSA and the overall estimate of anxiety scores from BASA were correlated. With N = 130, the results of the Pearson product moment correlation indicated a coefficient of .02448. This zero-order correlation suggests that there was no correspondence between the subjects self-report of anxiety and the observer-rated level of anxiety.

Data derived from the study would seem to indicate that the treatment technique of counterattitudinal messages is a viable method for assisting anxious students overcome communication apprehension, and that it has some advantages. The effectiveness of the treatment does not depend upon the presence of a live therapist, nor does it necessitate special training for speech communication educators. It can easily be employed within the academic setting as it is a relatively simple procedure to have the tapes available at any laboratory with tape recording equipment or in any room with a comfortable chair and a tape recorder. The availability of these cassette tapes for students

to use at their own convenience eliminates absenteeism so prevalent in group work. Daily attendance can be monitored by any procedure that requires signing in. The initial dollar outlay for making professional audiotapes and reproducing them is minimal; the cost can be covered by providing tapes for sale for additional listening of the counterattitudinal messages at home. These advantages are substantial.

This article is based on a master thesis conducted by the author under the supervision of Dr. Carl E. Larson, University of Denver, and Dr. Paul Page, Dean of Arts and Science, University of Nevada-Reno. Acknowledgement is also due Dr. Barbara Thornton, Drs. David Seibert and Robert Peterson at UNR.

REFERENCES

Barker, L. L., Cegala, D., Kibler, R., & Wahlers, K. Hypnosis and the reduction of speech anxiety. Central States Speech Journal, 1972 23, 28-35.

Boyle, J. K. Affirmation Techniques. Omega Seminar. Institute For Executive Research, Fall City, Washington.

Burgoon, J. K. The unwillingness-to-communicate scale development and validation. Communication Monographs, 1976, 43, 60-69.

Clevenger, T., Jr. & King, T. A factor analysis of the visible symptoms of stage fright. Speech Monographs, 1961, 28, 296-698.

Fremouw, W. J., & Scott, M. Cognitive restructuring: An alternative method for the treatment of communication apprehension. Communication Education, 1979, 28, 129-133.

Fremouw, W. J., & Zitter, R. A comparison of skills training and cognitive restructuring-relaxation for the treatment of speech anxiety. Behavior Therapy, 1978, 9, 248-259.

Giffin, K., & Bradley, K. Group counseling for speech anxiety: An approach and rationale. Journal of Communication, 1969, 19, 22-29.

Goldfried, M., & Trier, C. Effectiveness of relaxation as an active coping skill. Journal of Abnormal Psychology, 1974, 83, 348-355.

Goss, B., Olds, S., & Thompson, M. Behavioral support for systematic desensitization for communication apprehension. Human Communication Research, 1978, 4, 158-163.

Hyde, M. J. The experience of anxiety. A phenomenological investigation. The Quarterly Journal of Speech, 1980, 66, 140-154.

Ickes, W. K. A classical conditioning model for reticence. Western Journal of Speech Communication, 1971, 35, 48-55.

Judd, L. Research in improving self-concept in the basic course; Review and recommendations. Today's Speech, 1973, 21, 39-52.

Kougl, K. M. Dealing with quiet students in the basic college speech course. Communication Education, 1980, 29, 234-238.

Larson, C., Backlund, P., Redmond, M., & Barbour, A. Assessing functional communication. Denver, Colo.: University of Denver Press, 1978.

Lohr, J. W., & McManus, M. The development of an audiotaped treatment for systematic desensitization of speech anxiety. Central States Speech Journal, 1975, 26, 214-220.

Marshall, W. L., Stoian, M., & Andres, W. R. Skills training and self-administered desensitization in the reduction of public speaking anxiety. Behavioral Research and Therapy, 1977, 15, 115-117.

McCroskey, J. C. Oral communication apprehension: A summary of recent theory and research. Human Communication Research, 1977, 4, 78-96.

McCroskey, J. C. On communication competence and communication apprehension. Communication Education, 1980, 29, 109-111.

McCroskey, J. C., Daly, J., & Sorenson, G. Personality correlates of communication apprehension: A research note. Human Communication Research, 1976, 2, 376-380.

McCroskey, J. C., Ralph, D. C., & Barrick, J. E. The effect of systematic desensitization on speech anxiety. Speech Teacher, 1970, 19, 32-36.

McCroskey, J. C., & Richmond, V. P. Self-credibility as an index of self-esteem. Paper presented at the Convention of the Speech Communication Association, Houston, 1975.

McCroskey, J. C., Richmond, V. P., Daly, J. A., & Cox, B. The effects of communication apprehension on interpersonal attration. Human Communication Research, 1975, 2, 56-65.

Mulac, A. Effects of three feedback conditions employing videotape and audiotape on acquired speech skill. Speech Monographs, 1974, 41, 205-214.

Mulac A., & Sherman, R. Behavioral Assessment of speech anxiety. The Quarterly Journal of Speech, 1974, 60, 134-143.

Phillips, G. M. Reticence: Pathology of the normal speaker. Speech Monographs, 1968, 35, 38-49.

Scott, M. D., and Wheeless, L. R. The relationship of three types of communication apprehension to classroom achievement. The Southern Speech Communication Journal, 1977, 42, 246-255.

Shealy, C. N. 90 days to self-health. New York: The Dial Press. 1977.

Sherman, R. A., Mulac, A., & McCann, M. Synergistic effect of self-relaxation and rehearsal feedback in the treatment of subjective and behavioral dimensions of speech anxiety. Journal of Consulting and Clinical Psychology, 1974, 42, 819-827.

Trexter, L. D., & Karst, T. O. Rational-emotive therapy, placebo, and no treatment effects on public speaking anxiety. Journal of Abnormal Psychology, 1972, 79, 60-67.

Wells, E. L., & Marwell, G. Self-esteem: Its conceptualization and measurement. Beverly Hills, Cal.: Sage Publications, 1976.

Weissberg, M. Anxiety-inhibiting statements and relaxation combined in two cases of speech anxiety. Journal of Behavioral Therapy and Experimental Psychiatry, 1975, 6, 163-164.